

Windshield, Back Window, Stationary Glass and Heated Back Window

GROUP
44

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PART 44-01 General Glass Service

CLEANING HEATED BACK WINDOW

When cleaning the heated back window, to use only liquid window cleaning solvent. Do not use steel wool or abrasive powders as damage to the grid wires will result.

PART 44-02 Windshield, Back Window and Stationary Glass

COMPONENT INDEX Applies to Models As Indicated	All Models	Ford	Mercury	Meteor	Cougar	Fairlane	Falcon	Maverick	Montego	Mustang	Lincoln- Continental	Thunderbird	Continental- Mark III
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A page number indicates that the item is for the vehicle(s) listed at the head of the column.

1 REMOVAL AND INSTALLATION

WINDSHIELD OR BACK WINDOW—BUTYL TAPE SEAL—PIANO WIRE METHOD

REMOVAL

1. Remove the windshield wiper arms and blades if the windshield is to be replaced.
2. Remove the windshield or back window mouldings.
3. Insert a two-foot length of piano wire between the pinch weld flange and the glass. Wrap each end of the wire around small wood dowels. With the aid of an assistant, cut the seal all the way around the glass with a sawing motion and remove the glass. If the glass has been broken, remove the loose glass fragments from the car. Beginning at a corner, peel the butyl tape seal away from the body pinch weld flange; then, grasp the seal near the flange and pull directly away (Fig. 1).
4. Remove the two spacers from the lower edge of the glass opening.
5. Clean the body flanges thoroughly of all butyl tape and excess vinyl top cement (if equipped with a roof outside cover).
6. Perform sheet metal and paint repairs, if necessary.

INSTALLATION

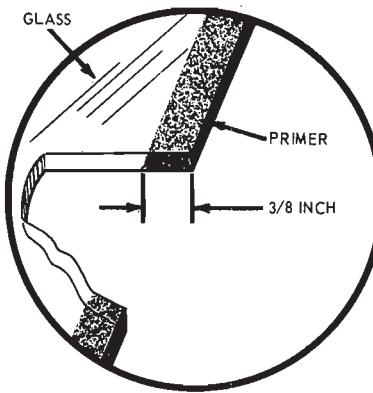
1. Install the spacers in the lower corners of the glass opening.
2. Check the moulding retainers along the top of the glass opening. Replace or repair retainers as required to insure adequate moulding retention. Replace any missing or

damaged weld studs with a screw (379560-S101). On models with a roof outside cover, apply masking tape or other protective material over the roof outside cover in the area of the glass opening to aid in clean-up operations after the installation.

3. Temporarily position the replacement glass in the glass opening and adjust it to the best glass to body flange overlap position. Mark this location with a crayon. Remove the glass and clean it thoroughly.

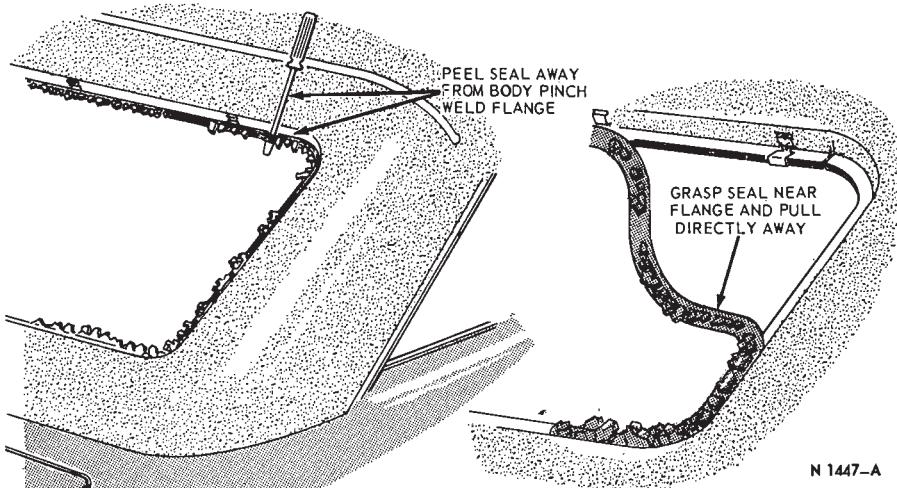
4. Apply primer (furnished in the butyl tape replacement kit C6AZ-19562-B) to the entire perimeter of the glass opening flange.

5. Apply primer around the entire perimeter of the inside and edge of the glass in the area that will contact the butyl tape (Fig. 2).



N 1571-A

FIG. 2—Primer Installation



N 1447-A

FIG. 1—Butyl Tape Removal

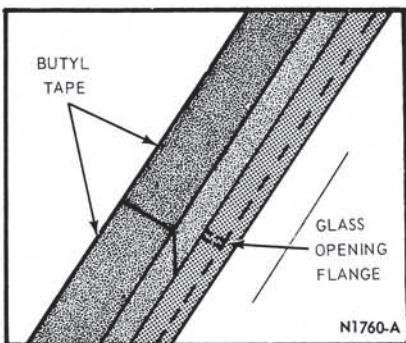


FIG. 3—Butyl Tape Seal Installation



FIG. 4—Removing Butyl Seal Type Windshield

6. Allow the primer to dry ten minutes before installation of the glass or butyl tape.

7. Starting at one side of the glass opening, place the butyl tape on the glass opening flange with the edge not more than $1/16$ inch from the opening edge of the flange. **Do not allow the butyl tape to overhang the edge of the flange. Do not stretch the butyl tape when fitting it to the corners.** Carefully splice the two ends of the tape at the side of the glass opening (Fig. 3).

8. Place the glass in the opening, using the crayon mark to locate the best position for equal seal contact.

9. Firmly press the glass against the butyl tape with hand pressure. Then, inspect the appearance of the butyl tape through the glass. A dull

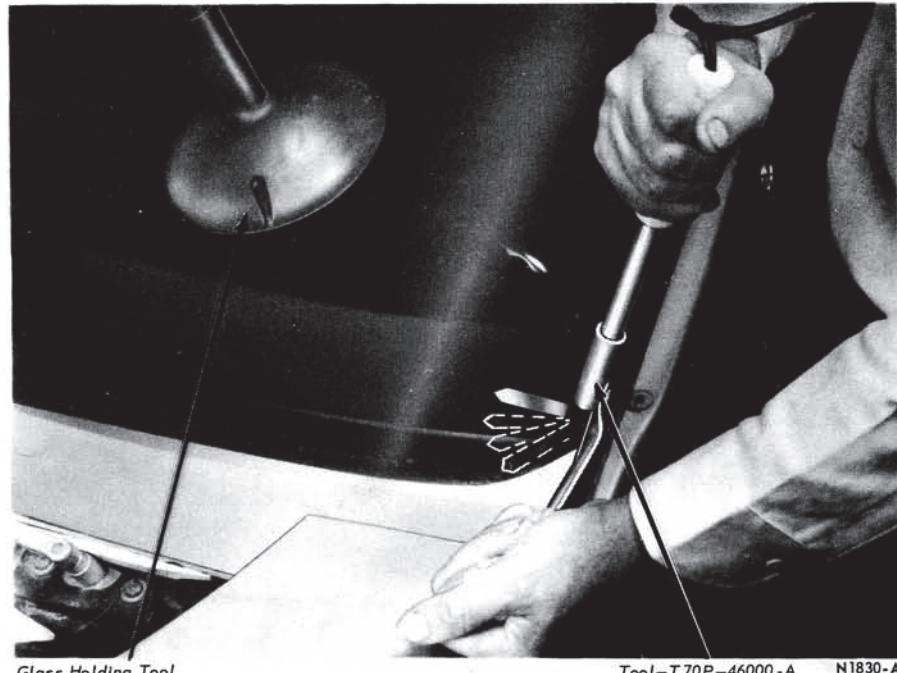


FIG. 5—Cutting Corner Seal

spot indicates an area where the butyl tape does not contact the glass surface. Additional hand pressure will seal most areas. **When installing a windshield, no more than a 0.20 inch clearance should exist between the pinch weld flange and the rear surface of the glass.**

10. Remove any excess primer from the glass with a razor blade and wipe with a clean cloth dampened in naphtha.

11. Water test the installation around the entire perimeter of the glass. Repair any leaks by applying liquid butyl (C5AZ-19554-A) around the edge of the glass.

12. Install the back window mouldings or the windshield mouldings and wiper arms and blades. Then, clean the glass and surrounding area.

WINDSHIELD AND BACK WINDOW—BUTYL SEAL TYPE—HOT KNIFE METHOD

REMOVAL

1. Remove the windshield wiper arms.

2. Remove the windshield or back window mouldings.

3. Using special tool T70P-46000-A, insert the blade under the edge of the glass (Fig. 4). Cut the butyl seal as close to the inside surface of the glass as possible. To cut the butyl at the lower corners of the windshield, move the handle of the

tool as close to the corner as possible. Then, rotate the blade downward to cut the corner butyl seal (Fig. 5).

4. Remove the windshield from the vehicle.

INSTALLATION

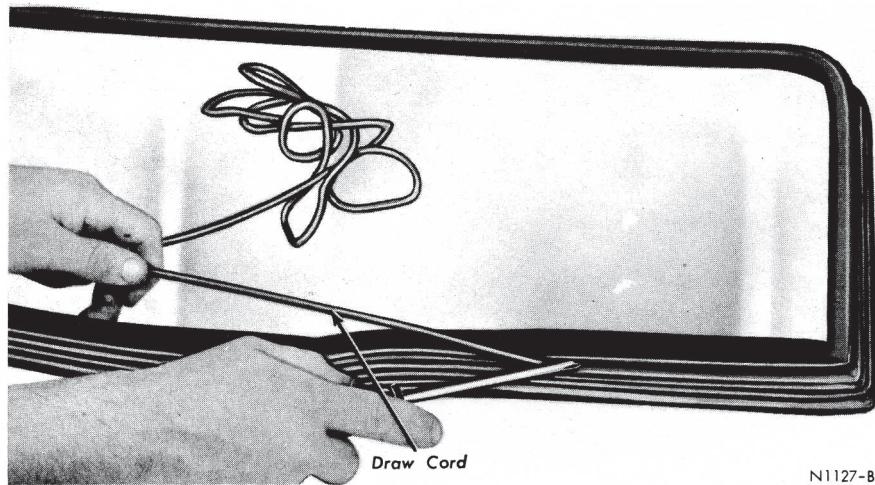
1. Position the new windshield or back window in the glass opening. Use the spacers provided with the special tool to prevent the glass from sticking to the butyl. Adjust the glass until it is properly seated. Mark the location of the glass.

2. Remove the glass and thoroughly clean the inside edge.

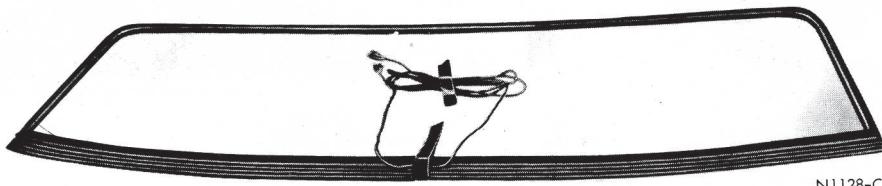
3. Apply the butyl bead on top and in the center of the existing butyl all around the glass. Start at the side opposite the original butyl splice. Do not stretch the butyl.

4. Apply primer to the inside edge of the glass where it will contact the butyl. Allow the primer to dry one minute.

5. Position the glass in the glass opening and align the markings previously made. Press the glass firmly into the butyl seal, using only hand pressure. Inspect the appearance of the glass. A dull spot indicates an area where the glass is not contacting the butyl seal. Use additional pressure to seal these areas. **When installing a windshield, no more than a 0.20 inch clearance should exist between the surface of the glass and the pinch weld flange.**



N1127-B

FIG. 6—Draw Cord Installation—Typical

N1128-C

FIG. 7—Draw Cord Installed —Typical

6. From outside the vehicle, apply liquid butyl sealer (C5AZ-19554-A) around the outer edge of the glass. Allow the liquid butyl to form a skin, then water test the glass for leaks.

7. Remove the excess primer from the inside surface of the glass with a razor blade. Wipe the glass with a naphtha dampened rag.

8. Install the window mouldings and windshield wiper arms.

WINDSHIELD OR BACK WINDOW GLASS—WEATHERSTRIP TYPE SEAL

REMOVAL

When replacing the heated back window (Thunderbird and Continental Mark III) it will be necessary to remove the interior side garnish mouldings and disconnect the window wires at the connectors on both sides of the window. Then, proceed as follows:

1. Remove the glass outside mouldings from the vehicle with the tool shown in Fig. 11.

2. Remove the window interior garnish mouldings.

3. With an assistant, push the glass

and weatherstrip from the window opening.

4. Clean all sealer from the glass and/or weatherstrip if either is to be re-used.

5. Clean all sealer from the glass opening.

INSTALLATION

1. Check all moulding retainers. Replace or repair damaged retainers to insure adequate moulding retention. Replace any missing or damaged weld studs with a screw (379560-S101).

2. Apply sealer in the glass groove of the weatherstrip.

3. Position the weatherstrip on the window glass.

4. Insert a draw cord in the pinch weld opening of the weatherstrip all around the weatherstrip (Fig. 6) and overlap the cord about 18 inches at the lower center of the glass. Tape the ends of the cord to the glass as shown in Fig. 7.

5. Position the window glass to the body window opening.

6. With an assistant applying hand

pressure from the outside, pull the draw cord to pull the lip of the weatherstrip over the window opening flange. Draw the weatherstrip lip over the lower flange, each side flange, and then over the upper flange.

7. Install the window outside mouldings.

8. Install the window interior garnish mouldings.

After a heated back window is installed (Thunderbird and Continental Mark III), apply a piece of tape to the pinch weld flange under the wires to prevent damage to the wires at the pinch weld flange. Then, connect the wires and install the garnish mouldings.

WINDSHIELD AND BACK WINDOW MOULDINGS

The windshield and back window mouldings for the various models are shown in Figs. 9 through 29. If the moulding is retained with retainers set in the glass opening, the moulding should be released from the retainers with the tool shown in Fig. 8. On some models, it will be necessary to remove the cowl top grille and/or the roof rail weatherstrip at the A (windshield) pillar to gain access to the windshield moulding retainers and/or attaching screws.

STATIONARY QUARTER WINDOW GLASS—MODEL 71

REMOVAL

1. Remove the stationary quarter window outside front moulding.

2. Using the tool shown in Fig. 8, remove the quarter window top outside moulding.

3. Push the window glass out of the window opening.

4. Using solvent, clean the old sealer from around the glass opening.

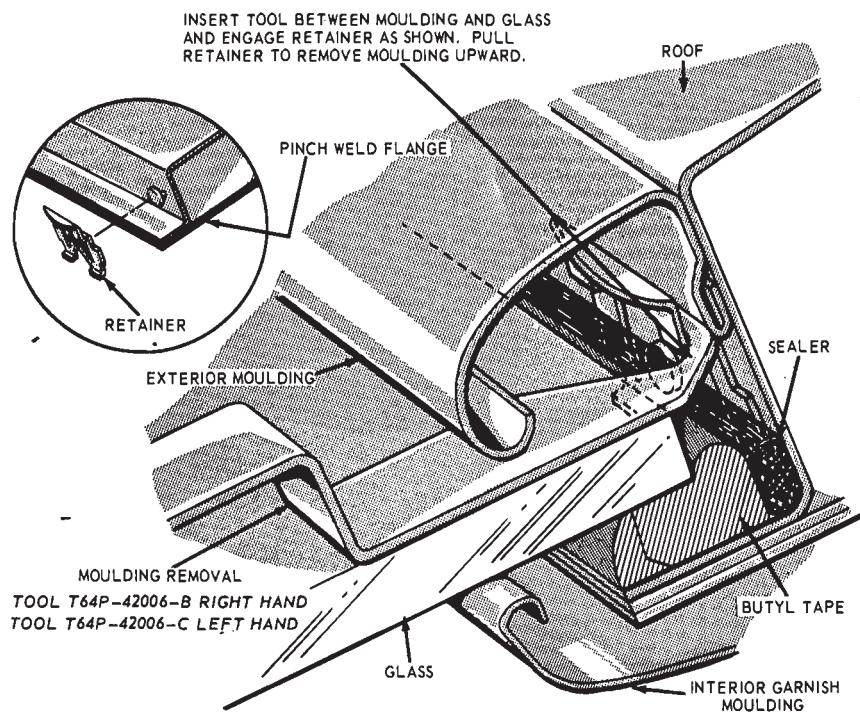
INSTALLATION

1. Position the glass to the glass opening.

2. Using a hooked tool, work the lip of the weatherstrip over the edge of the glass.

3. Apply sealer (C5AZ-19554-A) around the glass opening.

4. Check for water leaks.



N 1446-B

FIG. 8—Windshield or Back Window Moulding Removal

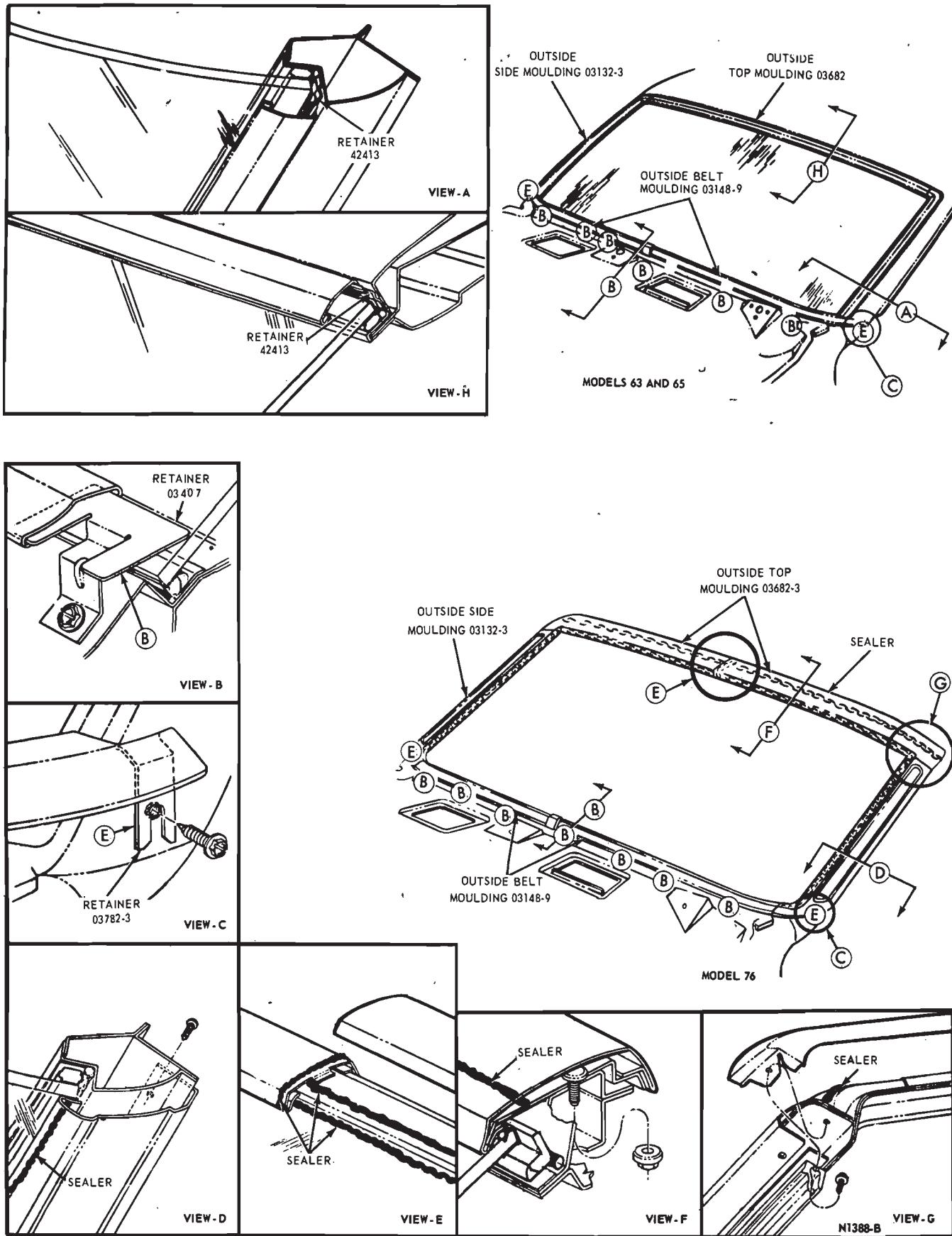


FIG. 9—Windshield Mouldings Installation—Mustang, Cougar and Maverick

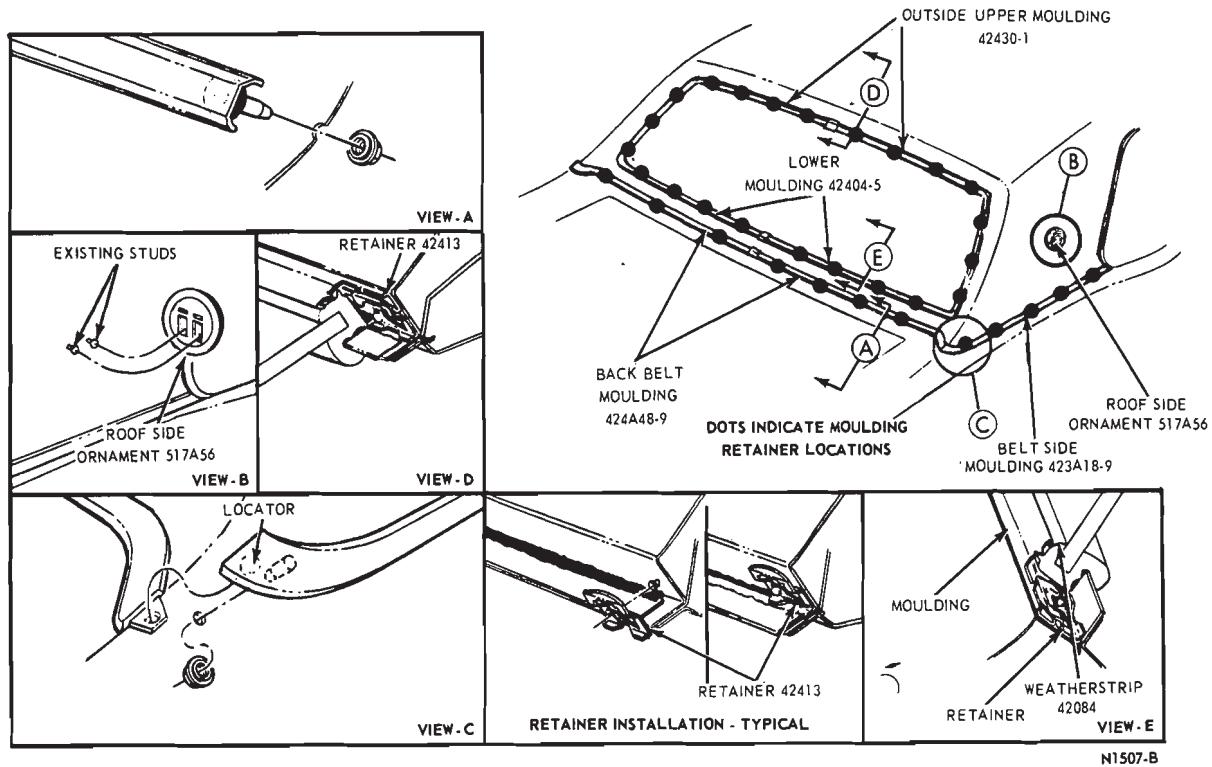


FIG. 10—Back Window Mouldings—Cougar Model 65

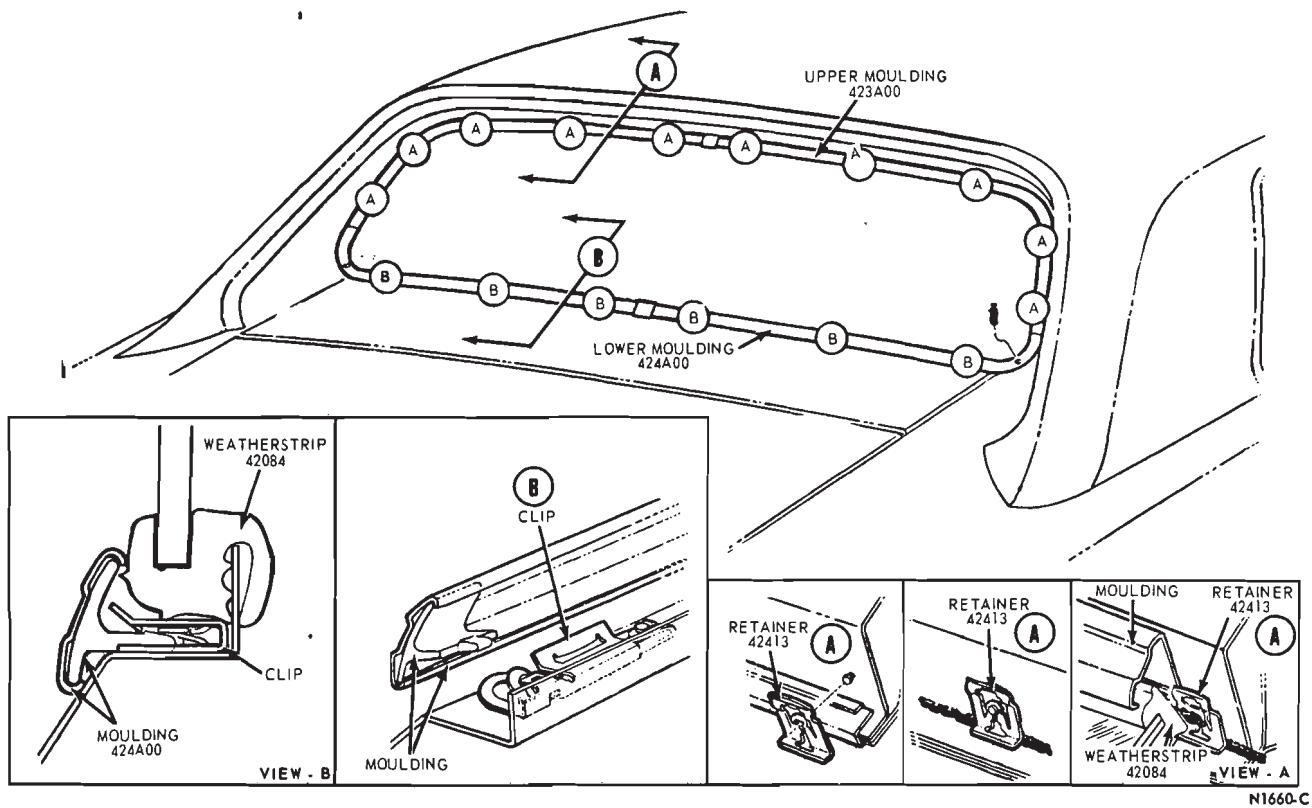
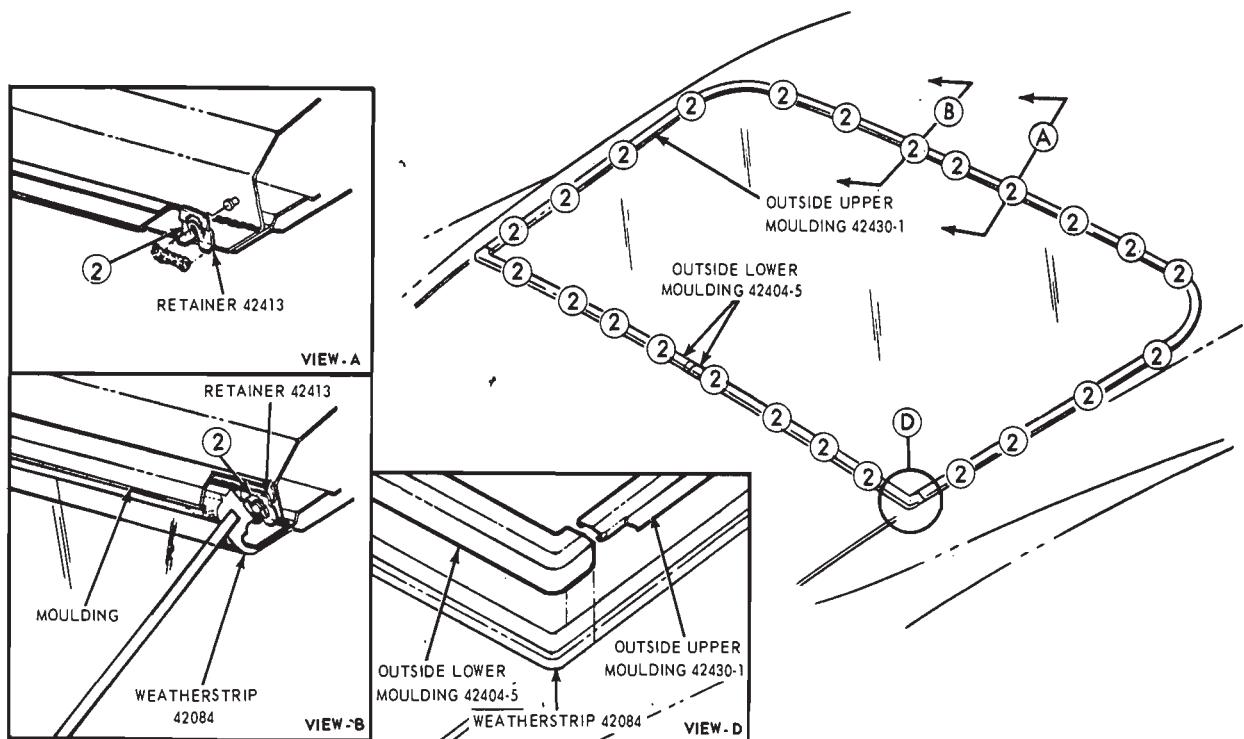


FIG. 11—Back Window Mouldings—Mustang Model 65



N1661-B

FIG. 12—Back Window Mouldings—Mustang Model 63

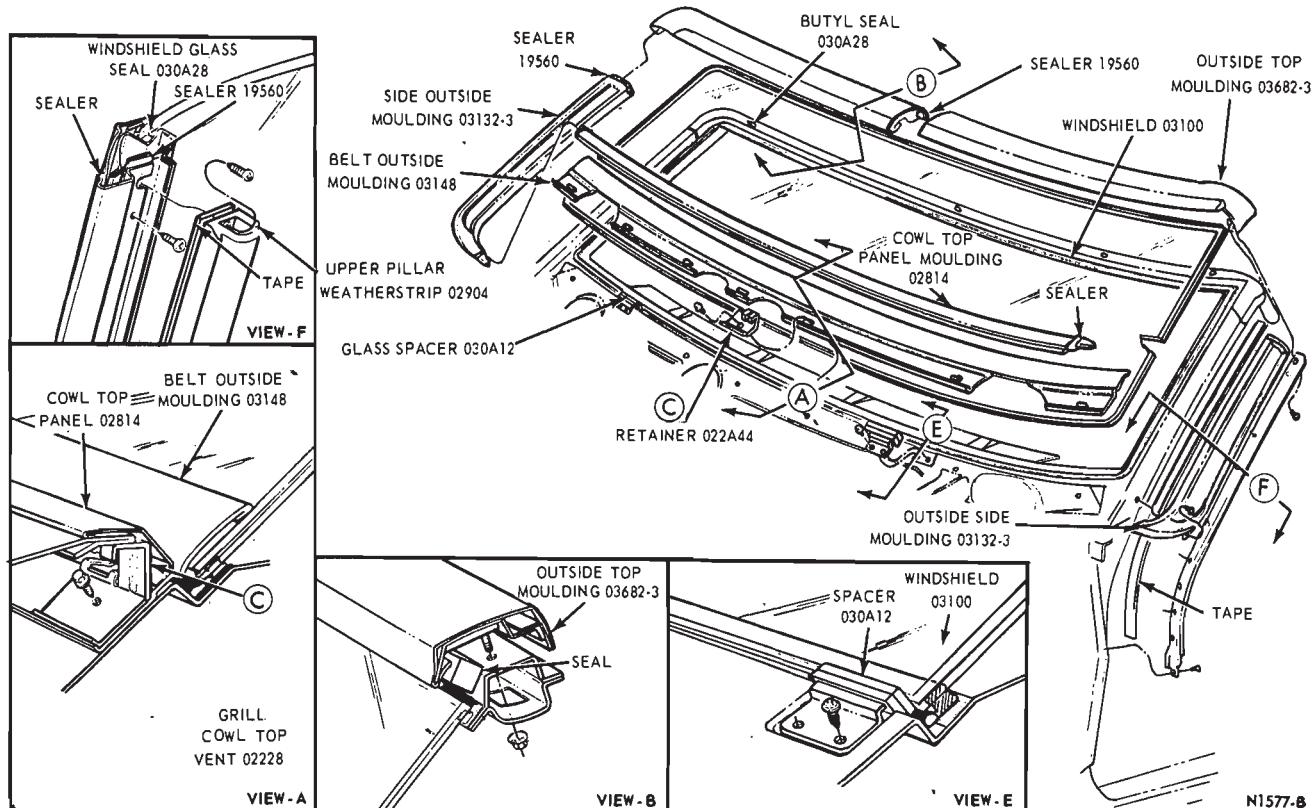


FIG. 13—Windshield Mouldings Installation—Ford, Mercury and Meteor Model 76

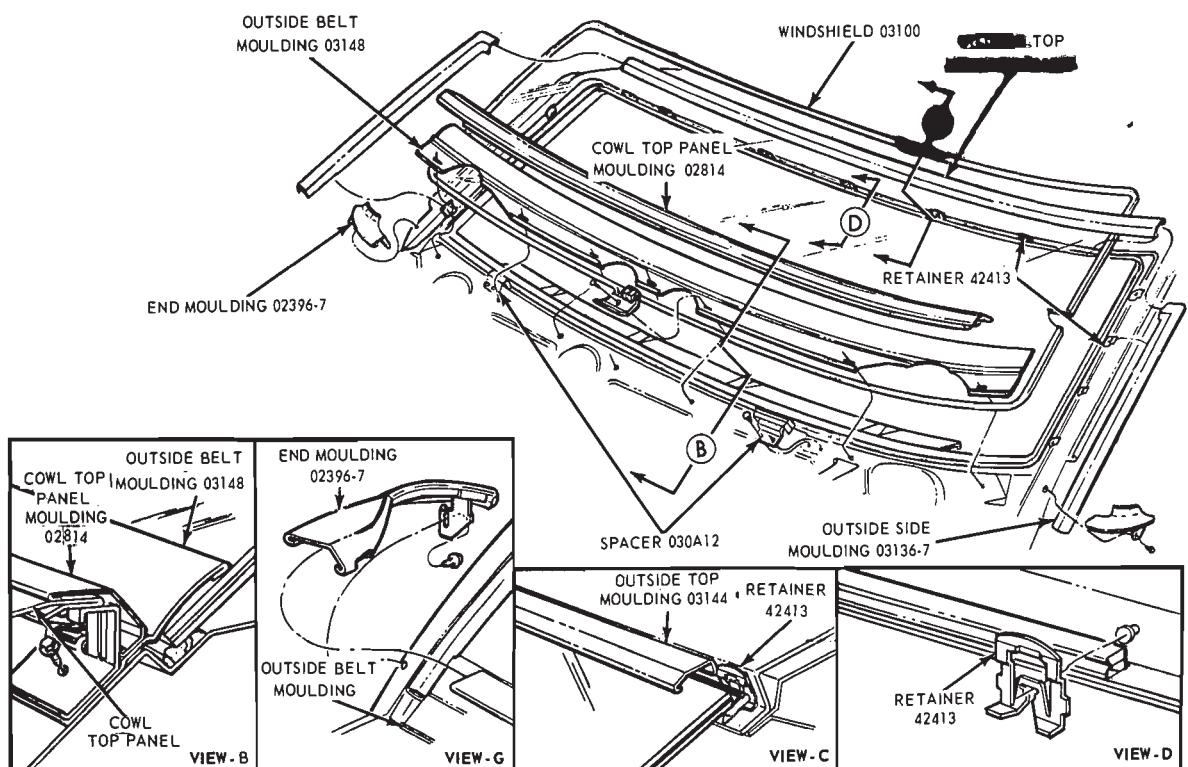


FIG. 14—Windshield Mouldings Installation—Ford, Mercury and Meteor Except Model 76

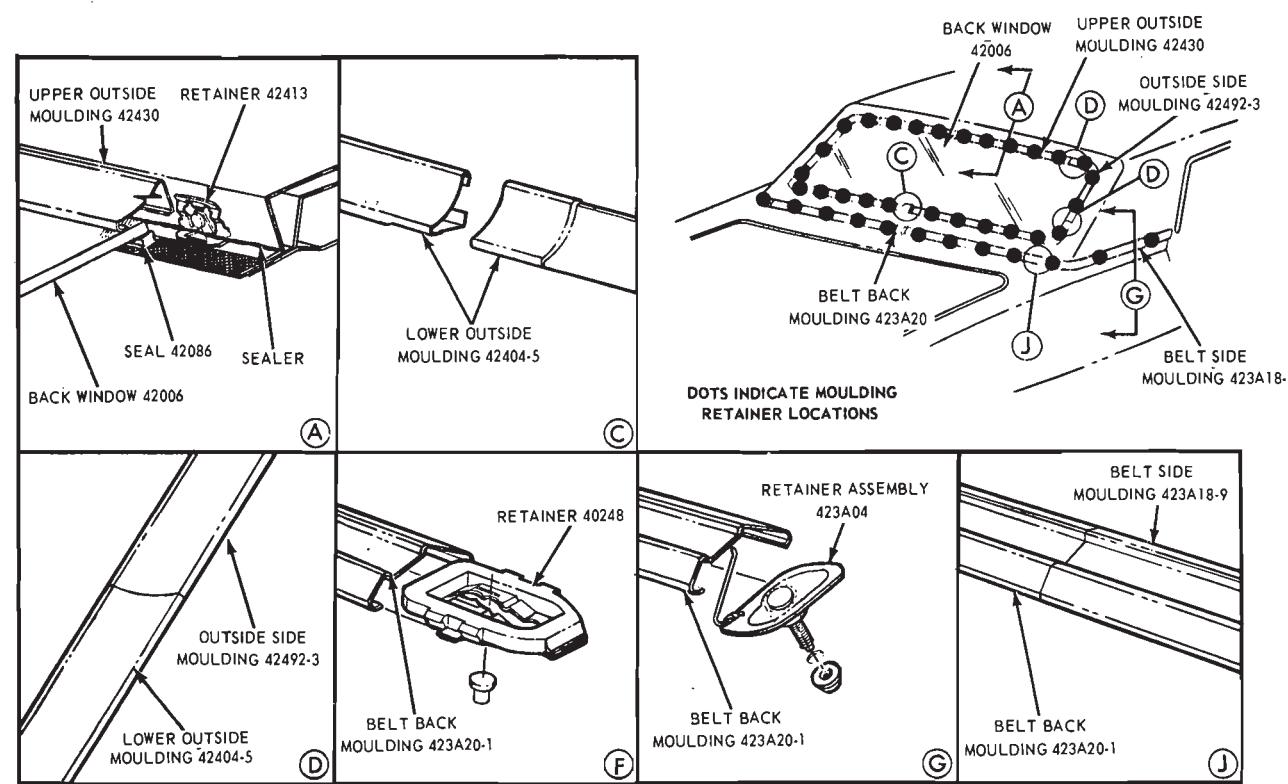


FIG. 15—Back Window and Belt Mouldings—Ford, Mercury and Meteor Models 53 and 57

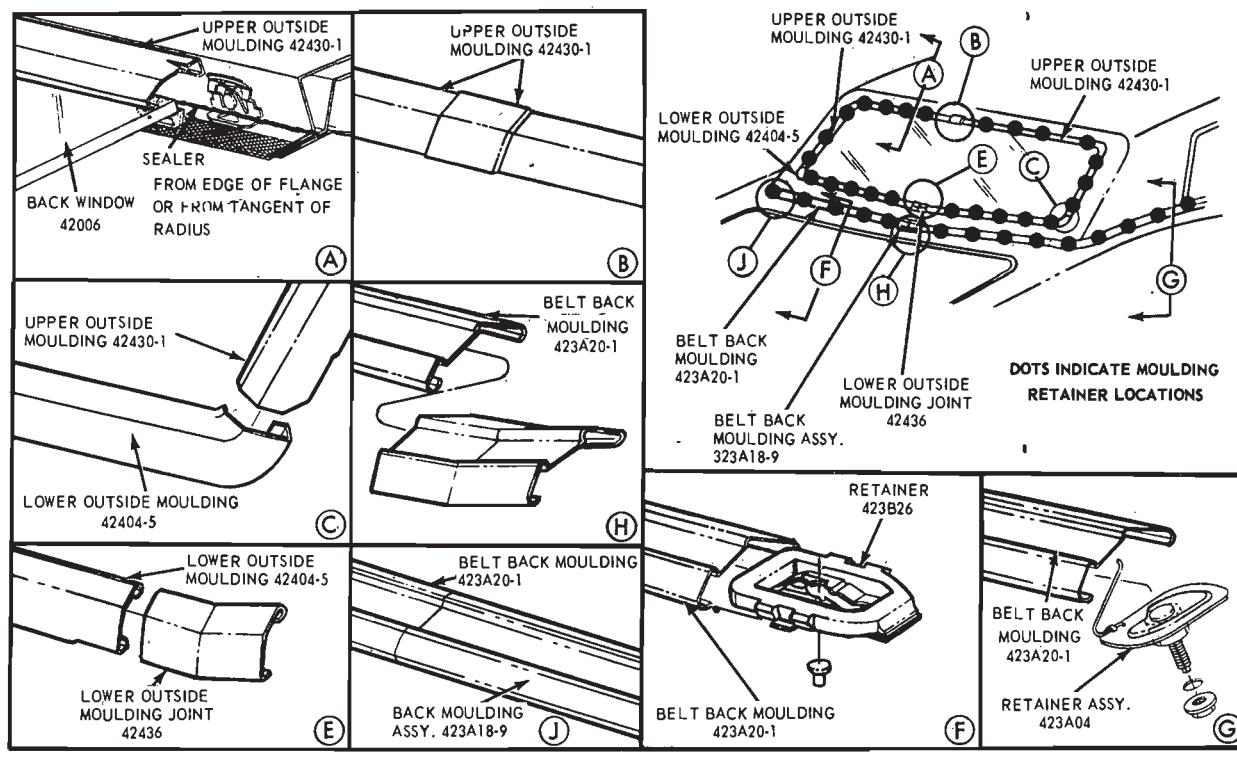


FIG. 16—Back Window and Belt Mouldings—Ford, Mercury and Meteor Model 65

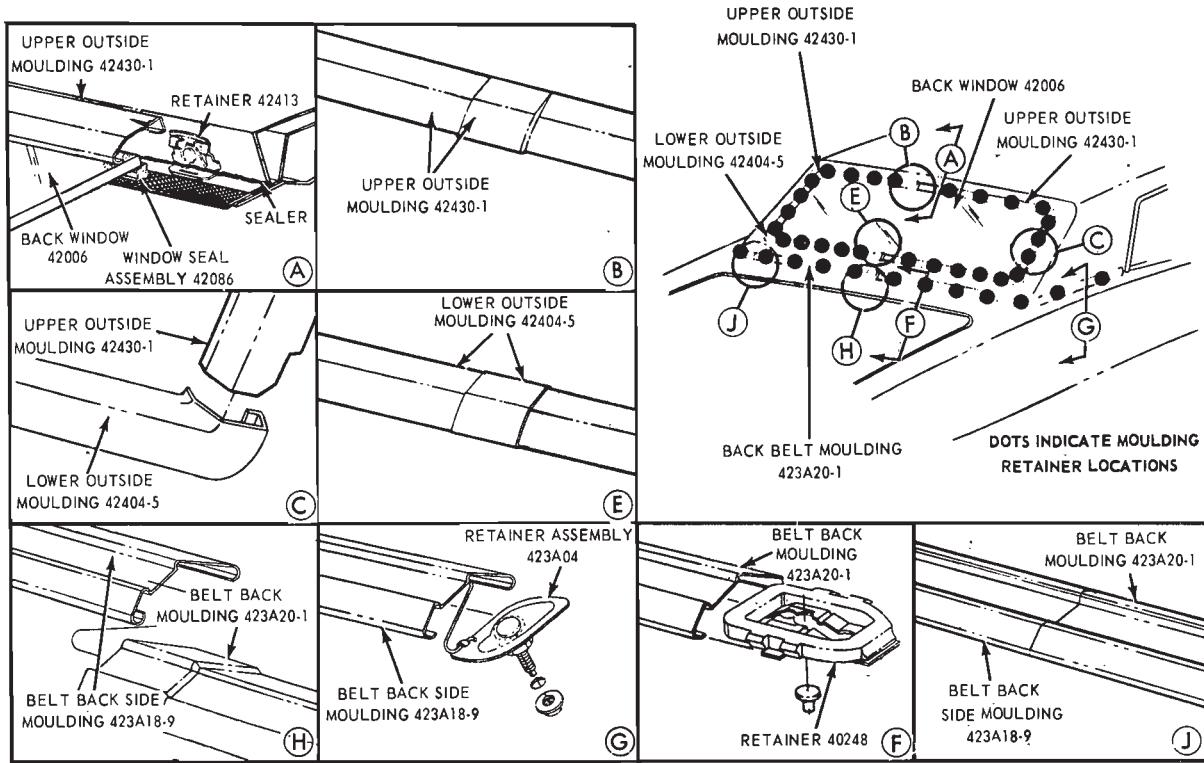


FIG. 17—Back Window and Belt Mouldings—Ford, Mercury and Meteor Models 54 and 62

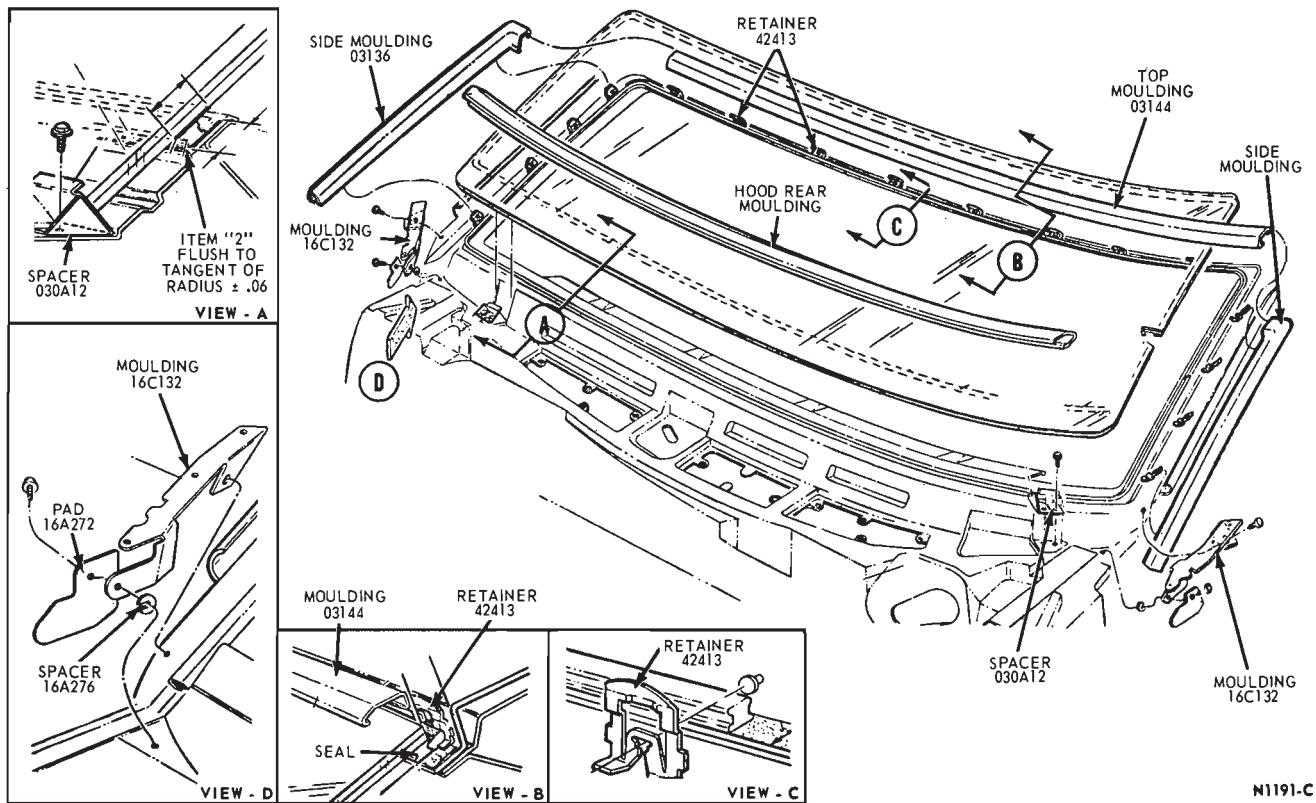


FIG. 18—Windshield Moulding Installation—Lincoln Continental

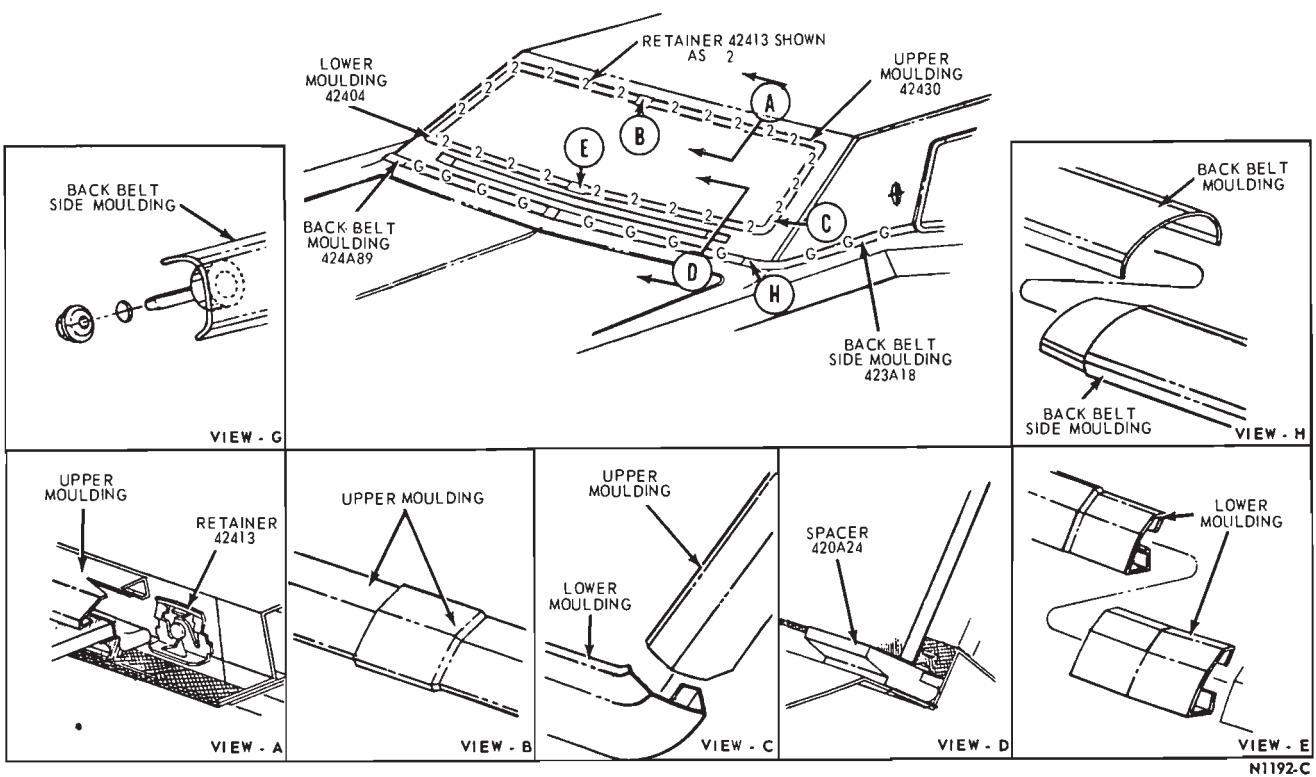


FIG. 19—Back Window Moulding Installation—Lincoln Continental Model 65

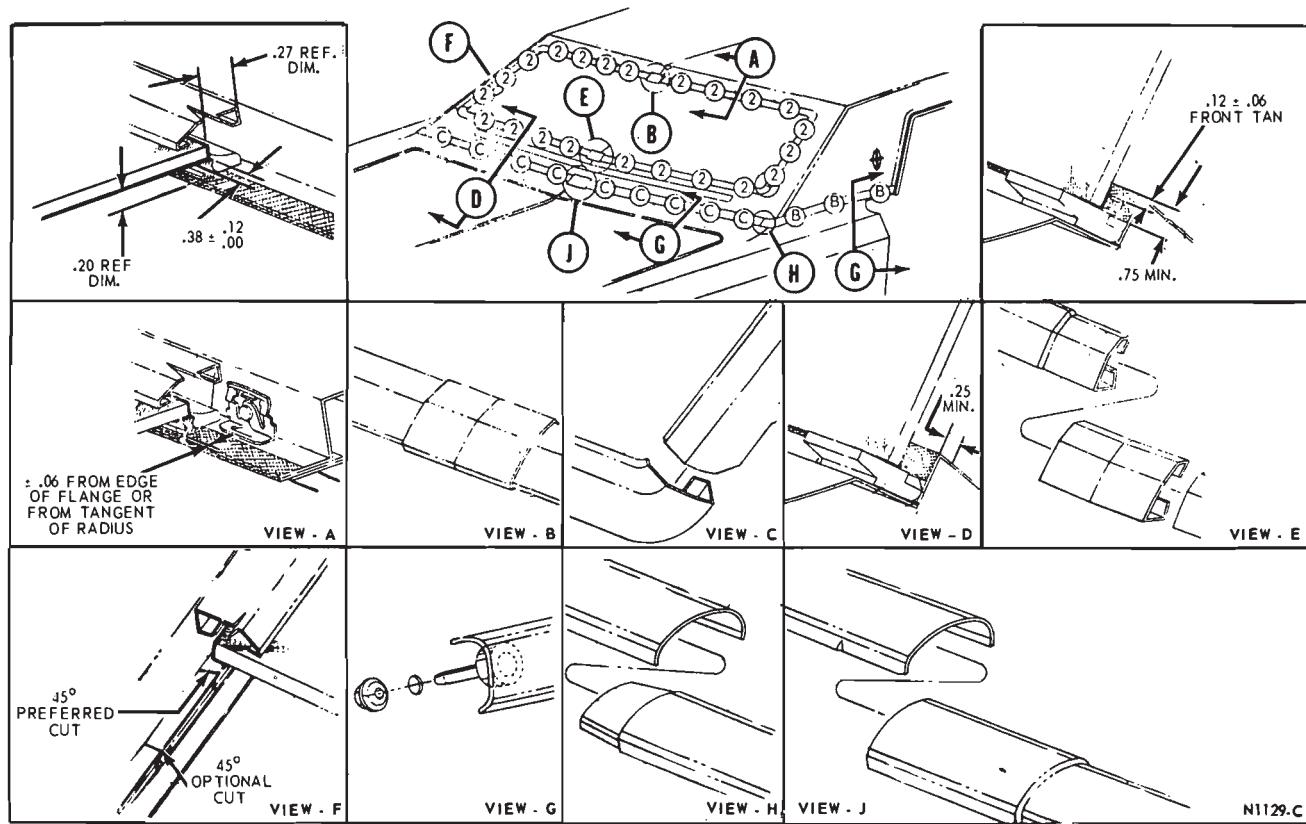


FIG. 20—Back Window Moulding Installation—Lincoln Continental Model 53

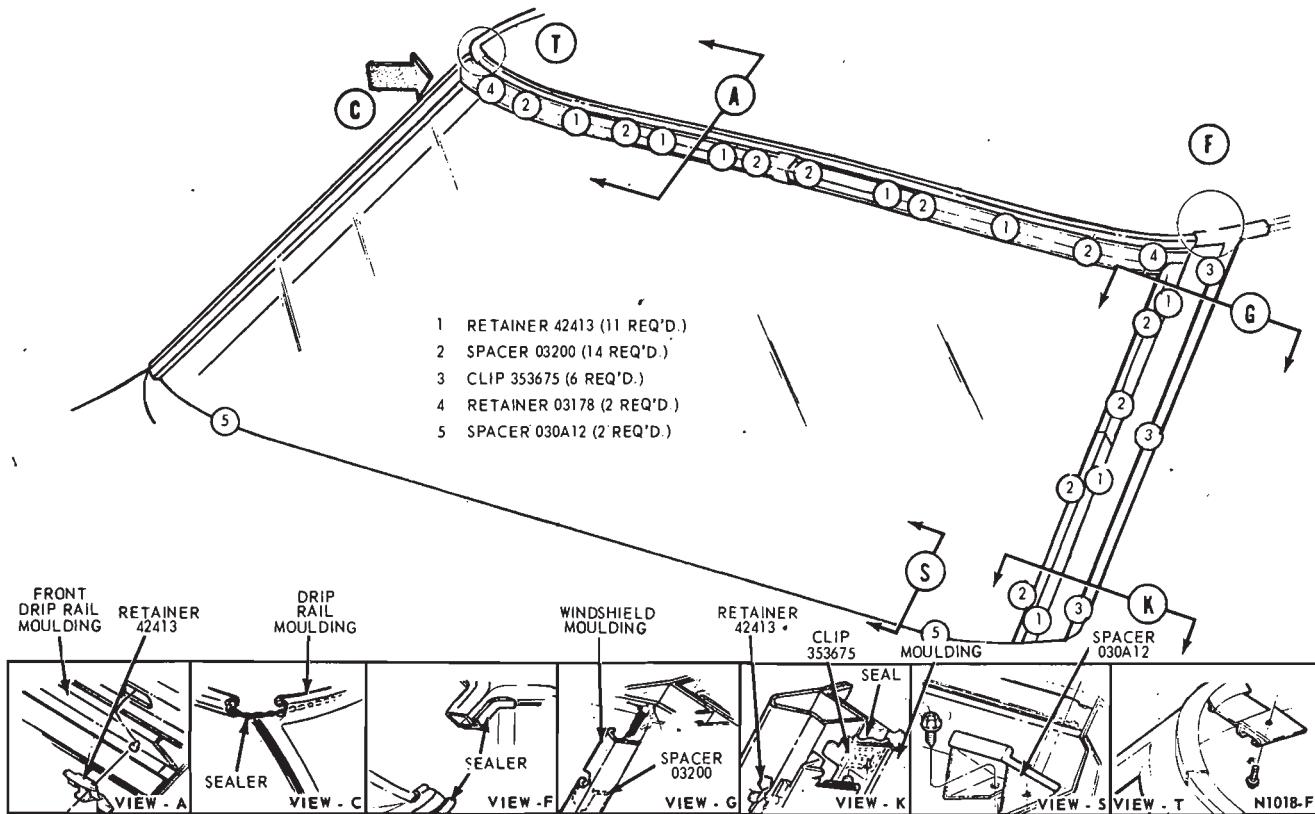


FIG. 21—Windshield Moulding Installation—Thunderbird and Continental Mark III

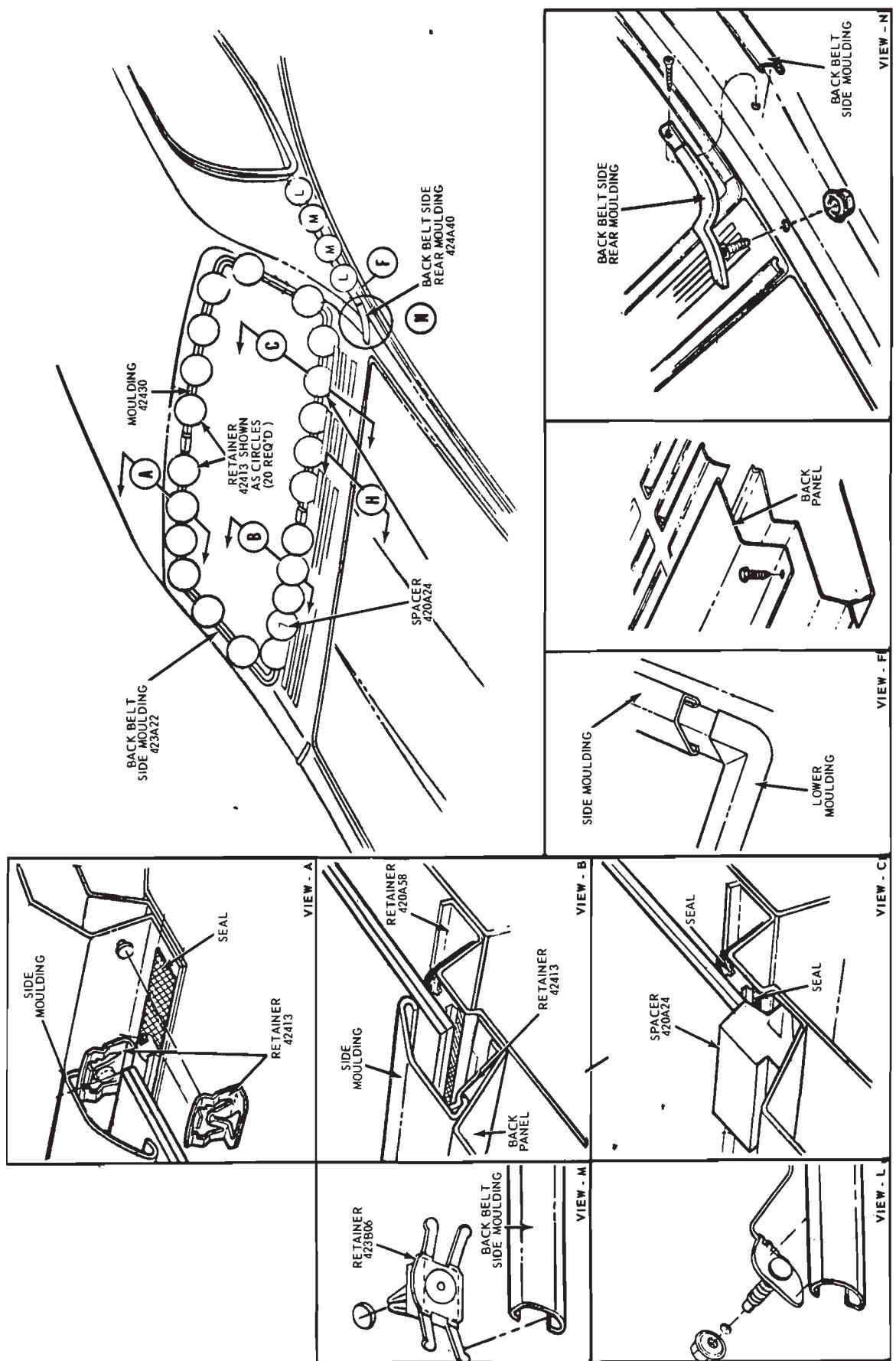


FIG. 22—Back Window and Exterior Moulding Installation—Thunderbird Model 65

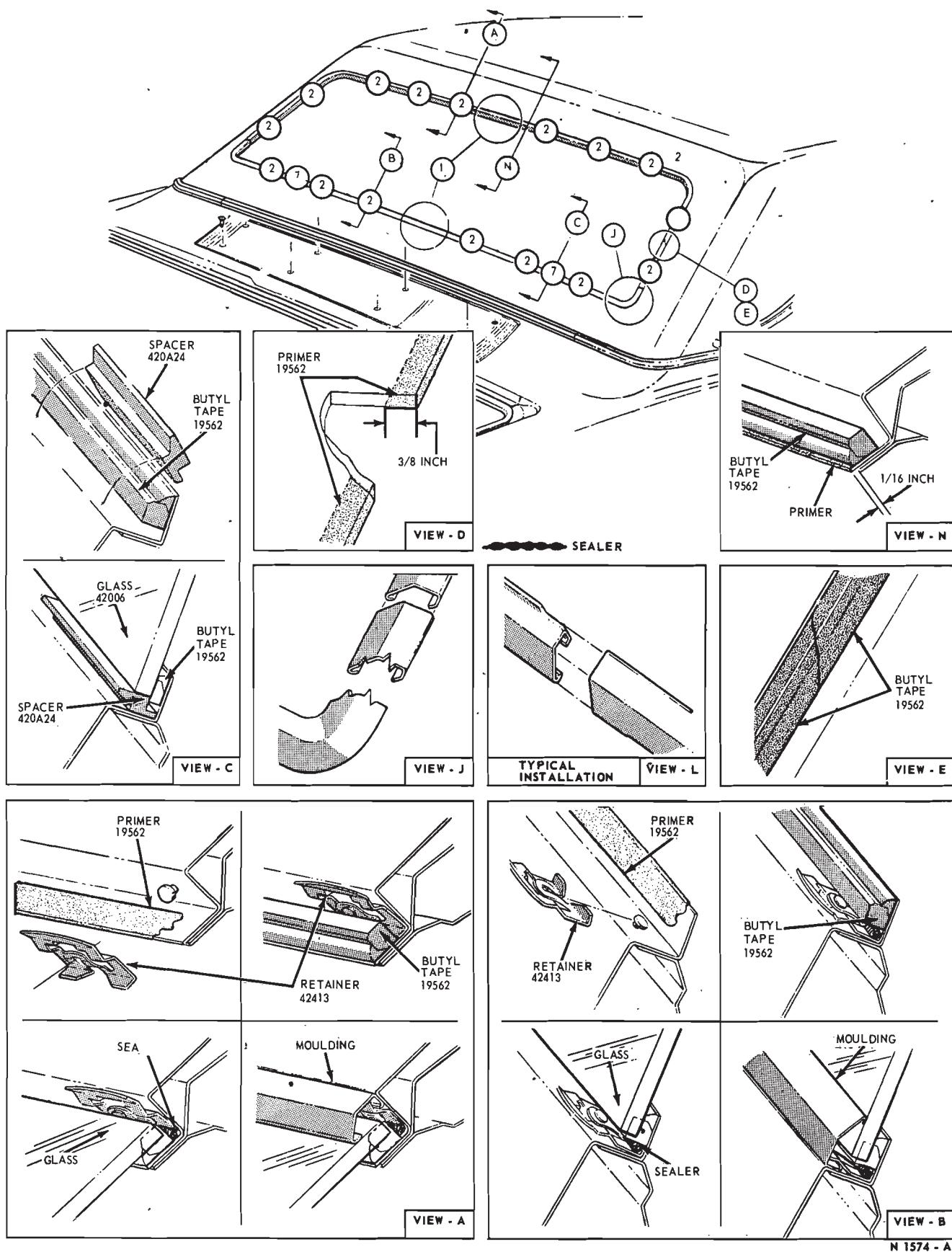


FIG. 23—Back Window and Exterior Moulding Installation—Thunderbird Model 57

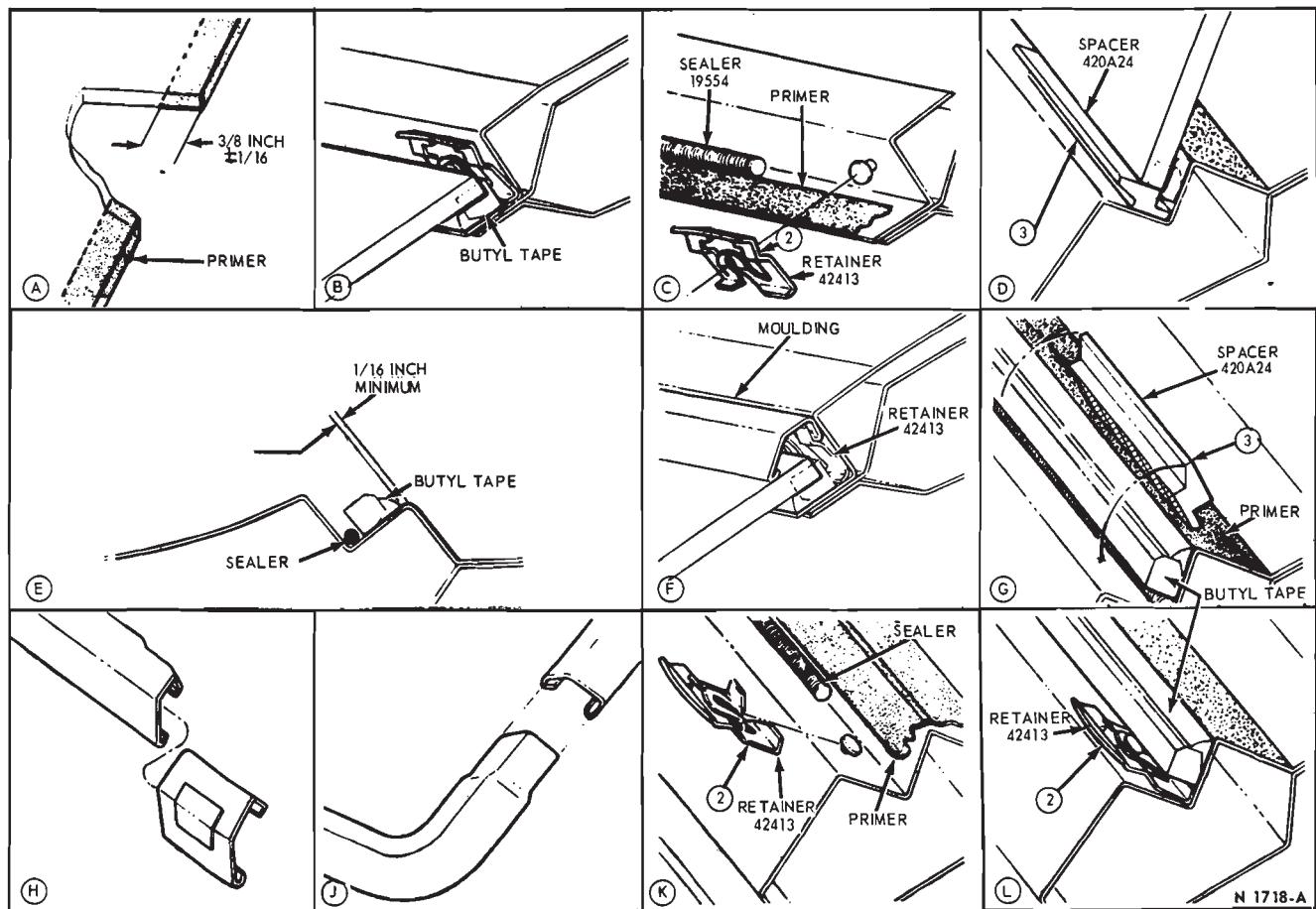
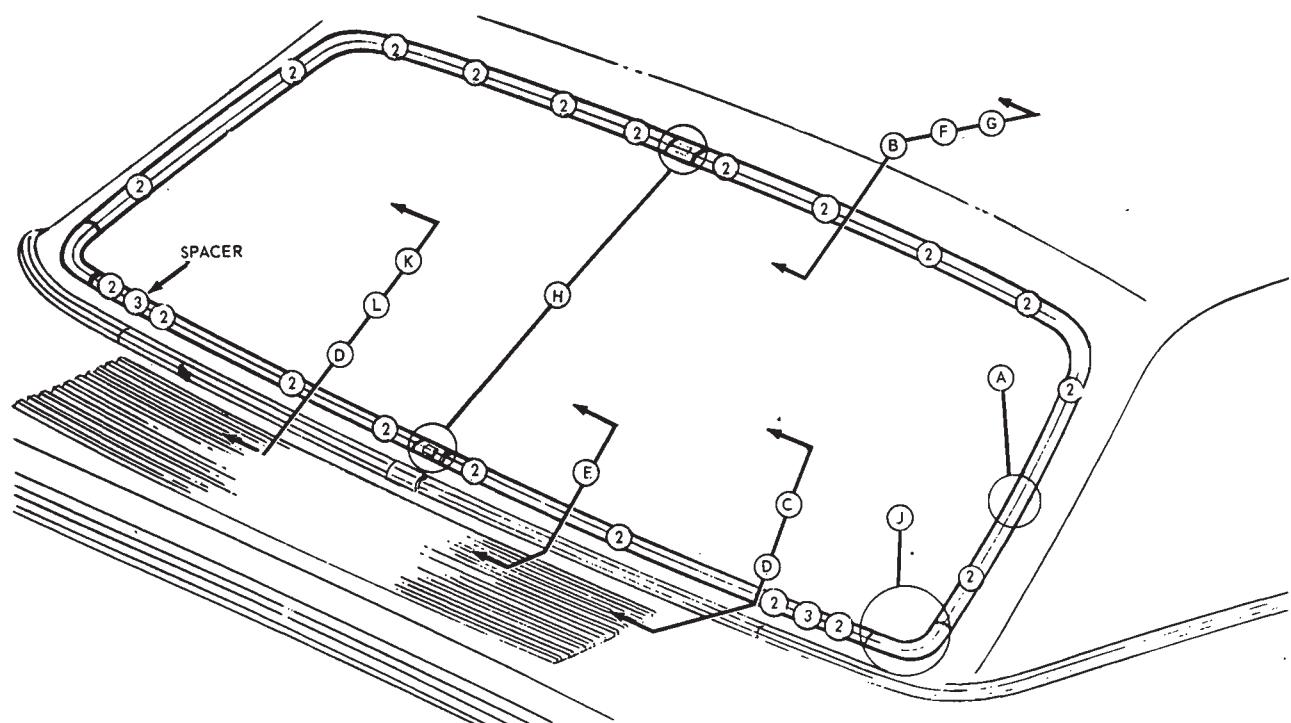


FIG. 24—Back Window and Exterior Moulding Installation—Continental Mark III

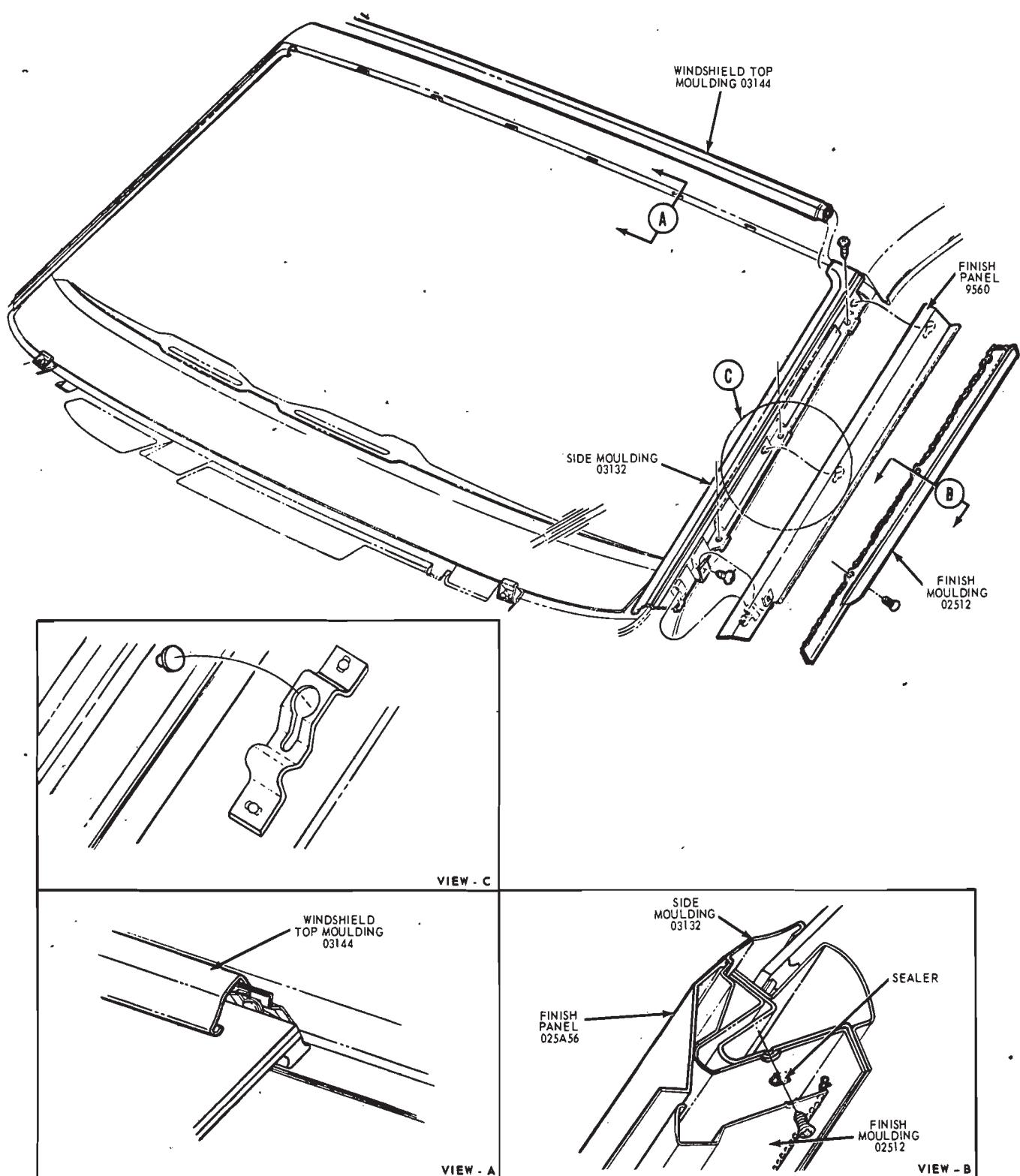


FIG. 25—Windshield and Moulding Installation—Montego, Falcon and Fairlane Except Model 76

N1489-C

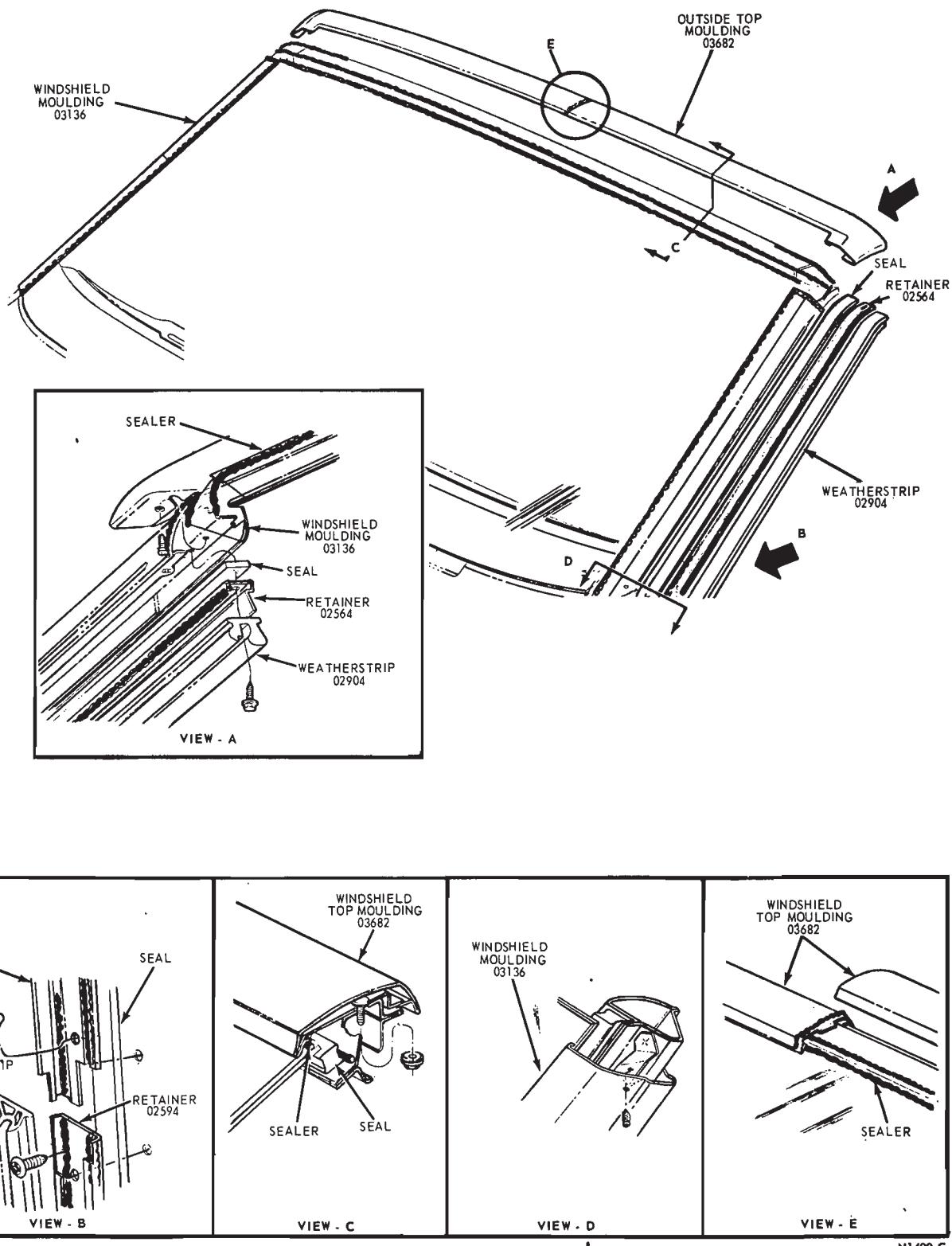


FIG. 26—Windshield and Moulding Installation—Montego, Falcon and Fairlane Model 76

N1490-C

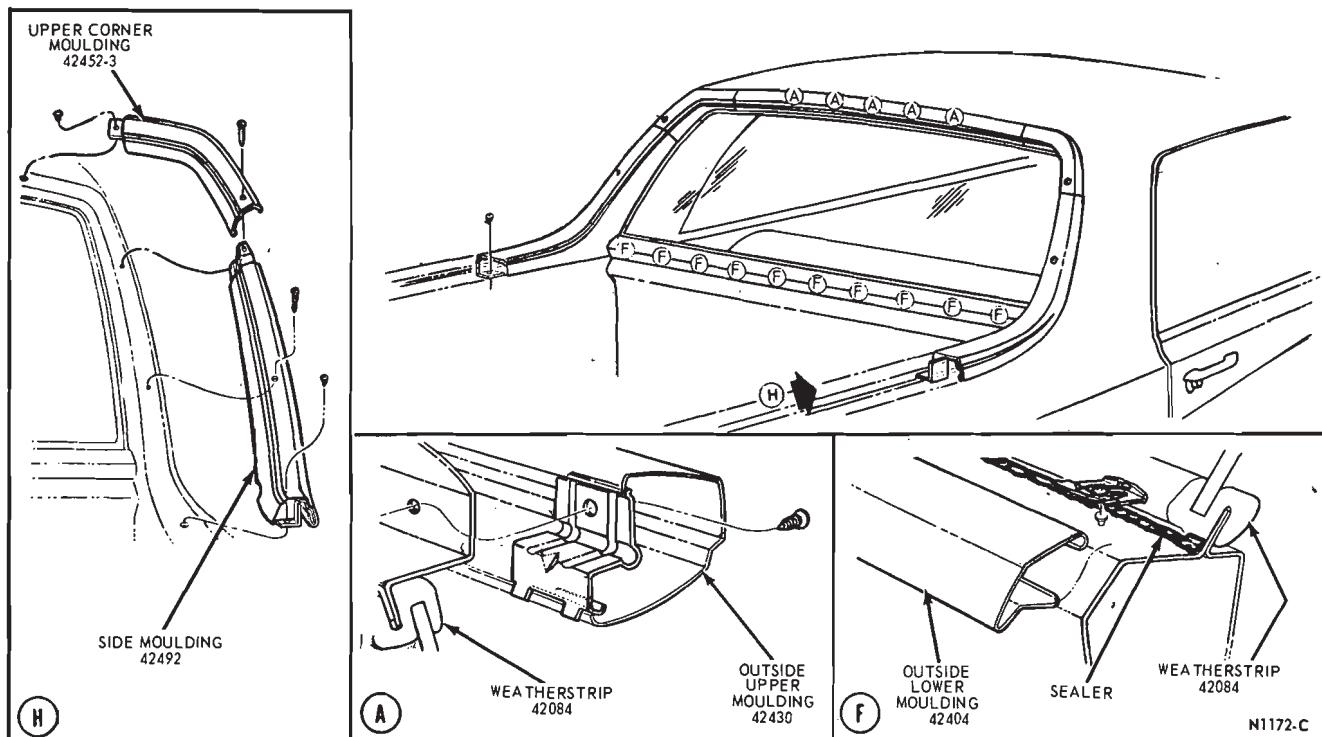


FIG. 27—Back Window and Exterior Moulding Installation—Fairlane Model 66

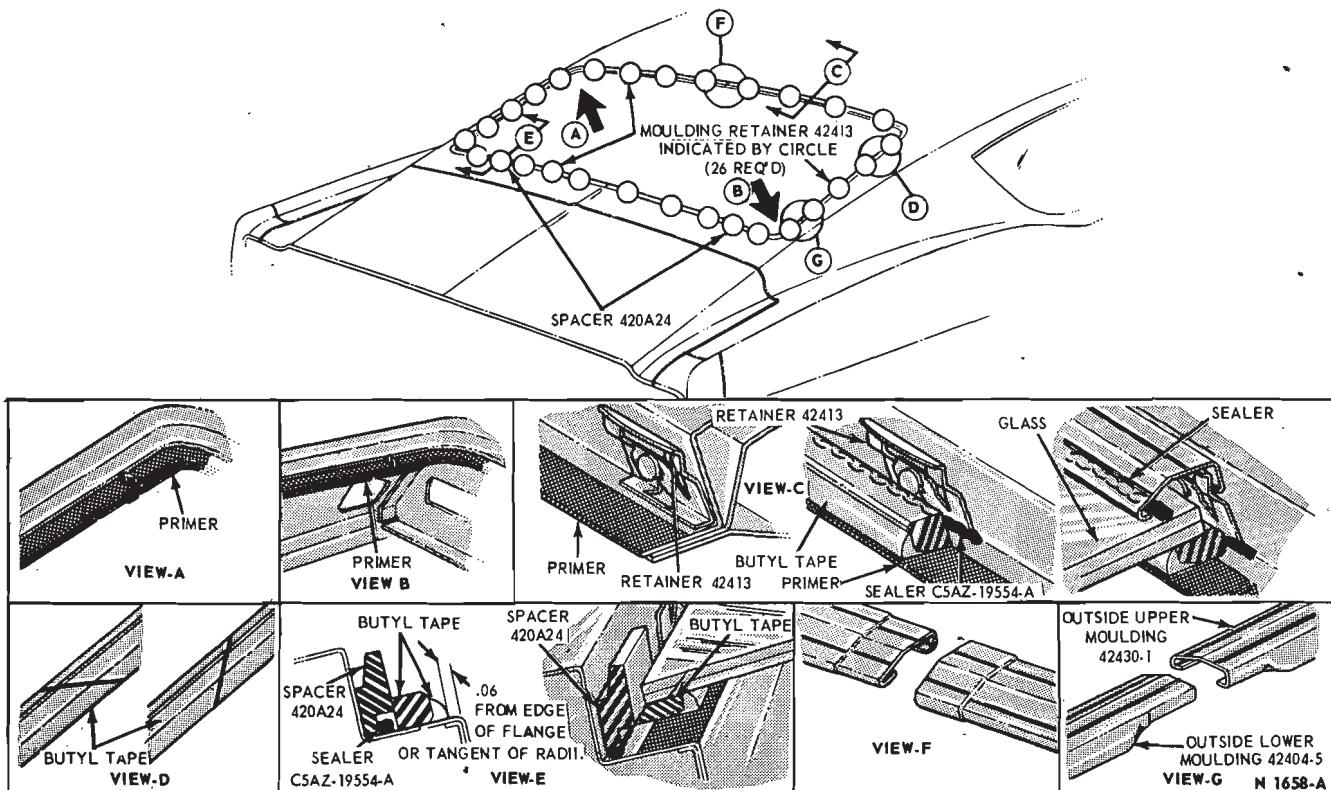
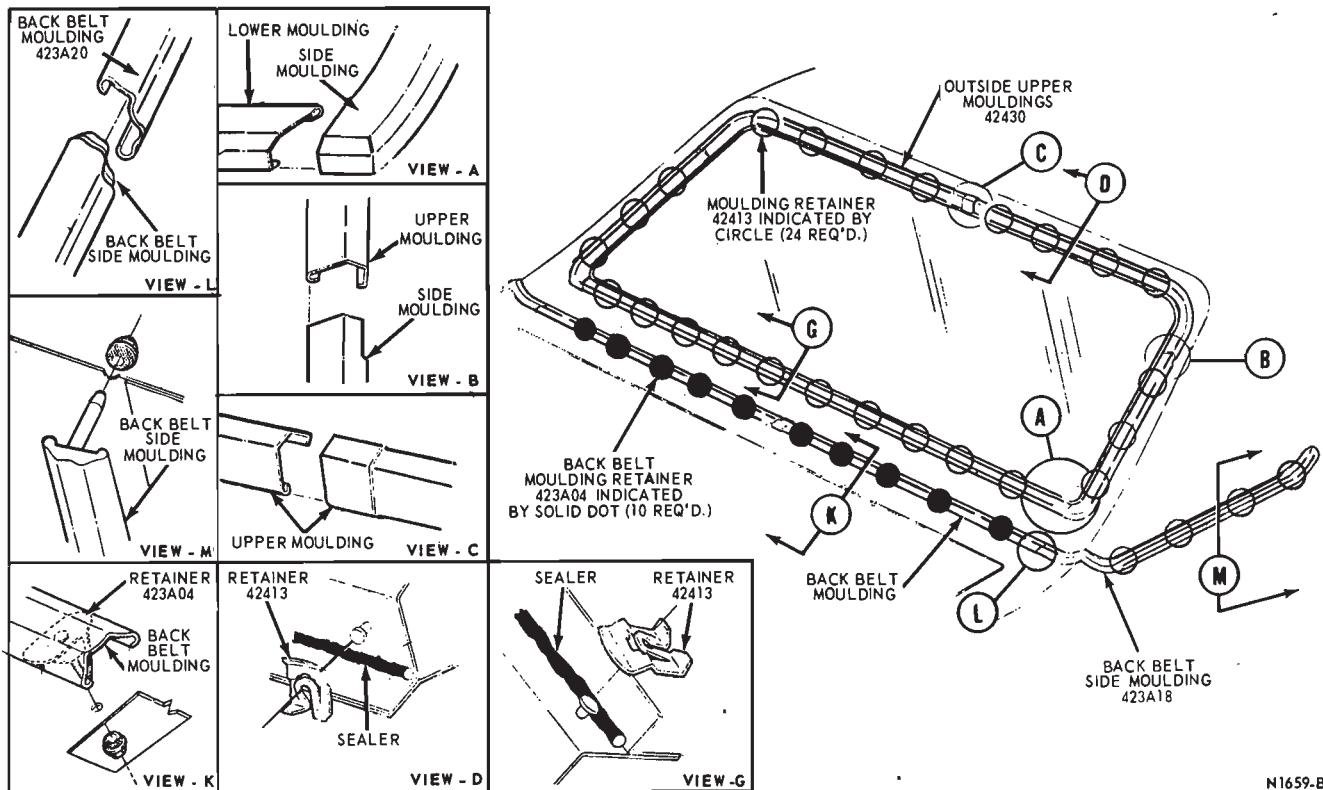


FIG. 28—Back Window and Exterior Moulding Installation—Falcon, Fairlane and Montego Model 63



N1659-B

FIG. 29—Back Window and Exterior Moulding Installation—Falcon, Fairlane and Montego Models 54, 62 and 65

PART 44-03 Heated Back Window

COMPONENT INDEX	All Models	Ford	Mercury	Meteor	Lincoln-Continental	Thunderbird	Continental-Mark III
Applies Only to Models Indicated							
GRID WIRE			03-02	03-02	03-02	03-02	03-02
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Testing							
HEATED BACK WINDOW SYSTEM	03-01						
Description and Operation							
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Removal and Installation		03-01	03-01	03-01	03-01	03-01	03-01
Testing							

A page number indicates that the item is for the vehicle(s) listed at the head of the column.

1 DESCRIPTION AND OPERATION

The heated back window system consists of a switch, time delay relay and a series of grid wires baked on the inside surface of the back window. Circuit protection is provided by a 20-ampere circuit breaker located on

the starter relay.

When the switch is turned to the ON position current is directed through the time delay relay to the grid wires on the rear window. The time delay permits the system to op-

erate for a specific time (5 minutes for Ford and Mercury Model, 10 minutes for Lincoln Continental, Continental Mark III and Thunderbird models), then automatically turn the system off.

2 TESTS AND REPAIR

TIME DELAY RELAY TEST

1. Connect the negative terminal of a battery to the case of the relay. Connect the positive battery terminal to the X terminal of the relay.
2. Connect a test light between the L terminal of the relay and ground.
3. Momentarily short the X and P terminals of the relay. The test light should go on and remain on for 3-7 minutes for Ford and Mercury models, 6-14 minutes for Lincoln Continental, Continental Mark III, or Thunderbird.

BACK WINDOW GRID WIRE TEST

1. Using a strong light inside the vehicle, from outside visually inspect the wire grid. A broken grid wire will appear as a brown spot.
2. Run the engine at idle. Set the REAR DEFOG switch to HI. The indicator light should come on.
3. Working inside the car with a 12-volt DC voltmeter, contact the broad silver strip on the passenger side of the back window with the negative lead of the meter. With the positive lead of the meter, contact the silver strip on the driver side. The meter

should read 11-13 volts.

4. Contact a good ground point with the negative lead of the meter. The voltage reading should not change.

5. With the negative lead of the meter grounded, touch each line of the heated back window at its mid point with the positive lead. A reading of 6 volts indicates the line is good. A reading of 0 volts means the line is broken between the mid point and the driver side of the line. A reading of 12 volts indicates the line is broken between the mid point and ground.

BACK WINDOW GRID WIRE REPAIR

Any break in the line longer than one inch cannot be repaired. The back window must be replaced. For breaks less than one inch long use the following procedure:

1. Mark the location of the break on the outside of the window.
2. Using fine steel wool, lightly rub the line inside the repair area. Then, clean the repair area with alcohol.
3. Apply a two inch long strip of cellulose tape on each side of the bro-

ken line and parallel to it. The break in the line should be at the center of the tape and the gap between the tape strips should be only as wide as the line.

4. Mix the repair coating (Ecco-coat CC-2) until it is of uniform consistency with the silver particles mixed throughout the fluid and apply it to the break with a small brush. Apply a heavy coat extending approximately 1/4 inch on either side of the break.

5. Allow the coating to dry at least 30 minutes, then apply a second heavy coat extending about 1/4 inch on either side of the break.

6. Allow to dry for three hours. Do not scour or clean the area with alcohol.

7. Test the back window.

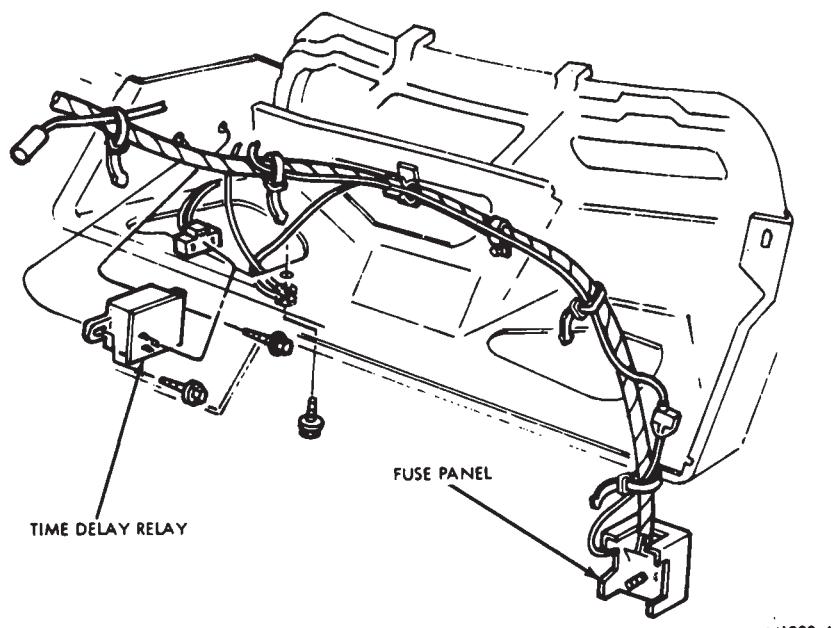
3 REMOVAL AND INSTALLATION

TIME DELAY RELAY

On Continental Mark III and Thunderbird models, the relay mounts on the brake pedal support bracket.

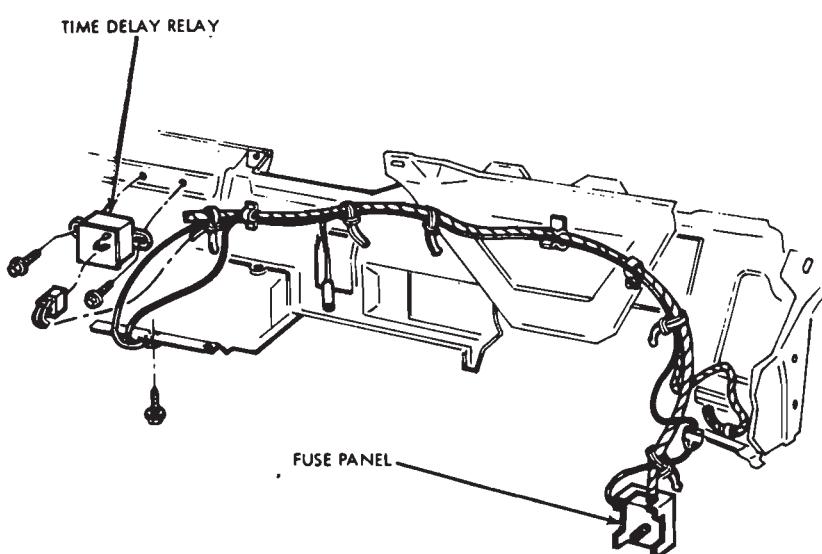
On Ford models, the relay mounts under the instrument panel near the ash tray (Fig. 3). On Lincoln Continental and Mercury models the relay mounts under the instrument panel near the right side of the vehicle (Fig.

4). To remove the relay, remove the two attaching screws and lower the relay. Disconnect the relay wires and remove the relay. On Lincoln Continental models, the instrument panel pad must first be removed.



N1822-A

FIG. 3—Heated Back Window Relay—Ford.



N1823-A

FIG. 4—Heated Back Window Relay—Mercury